



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,590	10/26/2001	Alexander Tormasov	44151-00005USPT	8122
26111	7590	12/14/2004	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			BATAILLE, PIERRE MICHE	
			ART UNIT	PAPER NUMBER
			2186	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,590

Applicant(s)

TORMASOV ET AL.

Examiner

Pierre-Michel Bataille

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-45 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to Applicant's communication filed October 18, 2004 in responding to Non-final Action dated July 4, 2004. Claims 1-8, 10-45 are pending in the application under prosecution, as claim 9 has been canceled and 20-45 newly added.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 and 0-45 have been considered but are moot in view of the new ground(s) of rejection.

Claim 3 recites: said automated computer cluster; there is lack of antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2186

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 7, 20, 30, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by (US 6,026,314).

With respect to claims 1, 7, 20, 30, and 45, US 6,026,474 teaches Shared client-side web caching using globally addressable memory comprising: a plurality of client nodes interconnected by a network, each of the plurality of client nodes sharing a shared addressable memory space of a globally addressable data store; memory management operations of the network node 212 to provide a virtual shared memory that can span across each node that connects into the network 254, i.e. each local node 212 views the network as a set of nodes that are each connected to a large shared computer memory (91); the shared memory provides the distribution mechanism for resource sharing among peer nodes running the file system (48); central server, commonly referred to as a proxy server, the proxy server providing a degree of sharing between individual users caches.

5. Claims 1, 7, 20, 30, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0145960 (Goren et al).

With respect to claims 1, 20, US 2002/0143960 (Goren) teaches a platform for providing hosting service (**Fig. 1C; 9D; 9E**) comprising: a computer cluster formed by a plurality of hardware-independent cluster nodes (**private network communities (PNC-1 ~ PNC-3) with the PNCs being actually cluster**

Art Unit: 2186

nodes of secure channels [par. 0052, 0011], said computer cluster including a control center **(PNC control manager, PNC server 70)**; and a plurality of virtual environments running on the computer cluster **(virtual private networks (VPN) or PNC control center; PNC workgroups forming virtual network segments (PNCS)) [par. 0052; 0011 & 007]**, wherein the virtual environments do not require dedicated memory **(a group of independent nodes with having access to shared not inherently dedicated infrastructure with all network-enabled application available to the clients) [Par. 0047]**, wherein said control center coordinates the functions of said plurality of hardware-independent cluster nodes **(PNC control manager or VNG server for establishing or managing each PNC or the other resources; each PNC is setup and controlled automatically, dynamically and remotely by a PNC server) [par. 0052; 0054 & 0055]**.

With respect to claim 7, 30, and 45, Goren teaches the method providing hosting service in a cluster computing system having: a plurality of hardware-independent cluster nodes **(private network communities (PNC-1 ~ PNC-3) with the PNCs being actually cluster nodes of secure channels [par. 0052, 0011]**; a control center for coordinating functions of said plurality of cluster nodes **(PNC control manager or VNG server 70 for establishing or managing each PNC or the other resources; each PNC is setup and controlled automatically, dynamically and remotely by a PNC server) [par. 0052; 0054 & 0055]**; and a plurality of virtual environment on the computer cluster **(virtual private networks (VPN) or PNC control center; PNC workgroups forming**

Art Unit: 2186

virtual network segments (PNCS)) [par. 0052; 0011 & 007] wherein the virtual environments do not require dedicated memory cluster (a group of independent nodes with having access to shared not inherently dedicated infrastructure with all network-enabled application available to the clients) [Par. 0047].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-6, 8, 10-19, 2-29, 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0145960 (Goren et al) in view of Tormasov et al (US 2002/0147815).

With respect to claims 14 and 39, Goren teaches a method for hosting service system ***[par. 0054]*** comprising: requesting a service from an operating system, operating a virtual environment for delivering the service to a user ***(virtual private networks (VPN) or PNC control center; PNC workgroups forming virtual network segments (PNCS)) [par. 0052; 0011 & 007];*** and utilizing a distributed file system for use by the virtual environment ***(a group of independent nodes with having access to shared not inherently dedicated infrastructure with all network-enabled application available to the clients) [Par. 0047; Par. 0131].*** Goren fails to teach the distributed file system having a

Art Unit: 2186

common name space. However, Tormasov teaches a distributed files system in a cluster based-network wherein the distributed files having a common name space [Par. 0030; 0039]. Therefore, it would have been obvious to one of ordinary skill in the art to include the uniformity of name space because the name would have guaranteed the clients accesses via Uniform resource Locator (URL).

With respect to claim 2-4, 8, 21-23, 31, Goren teaches said plurality of hardware independent nodes comprising a distributed files, said distributed files system being integrated and optimized and storing data for said plurality of virtual environments [**Par. 0067; 0054; 0100**]. Goren fails to teach the distributed file system having a common name space. However, Tormasov teaches a distributed files system in a cluster based-network wherein the distributed files having a common name space [Par. 0030; 0039]. Therefore, it would have been obvious to one of ordinary skill in the art to include the uniformity of name space because the name would have guaranteed the clients accesses via Uniform resource Locator (URL).

With respect to claims 5, 10, 25-29, 32-33, Goren teaches the system [**Fig. 1C**]: each of said plurality of virtual environments not requiring other dedicated hardware resources software [**par. 0027**]; providing virtualization of a full service computer with its own operating system [**Par. 0067; 0054; 0100**]; a unique administrative root user for each member of said plurality of virtual environments (**each PNC defining a domain comprised of a group of**

collaborating users having a common emphasis) [Par. 0048]; operating system parameter configuration [Par. 0050]. Goren however, fails to teach a file system template and a file tree. However, Tormasov teaches a system and method for distributed, highly scalable, wide area peer-to-peer network data storage wherein data and directory files include a file system template and file tree [abstract]. Therefore, it would have been obvious to one of ordinary skill in the art to include a file system template and a file tree because the file system template and file tree would have permitted management of the file.

With respect to claims 6, 11, 24, 37-38, and 43-44, Goren teaches the invention as claimed but fails to teach distributing updated files to achieve appropriate level of accessibility. However, Tormasov teaches a system and method for distributed, highly scalable, wide area peer-to-peer network data storage wherein data and directory files are divided into a plurality of pieces stored on different servers, the files are uniformly and independently named, utilizing a tree with a common root [Par. 0028] the method further provides a high degree of data coherence and synchronization, data storage flexibility, and maximum channel throughput and serviceability as the files are sent to separate servers for storage [Par. 0027; 0041]. Therefore, it would have been obvious to one of ordinary skill in the art to distribute updated files to achieve appropriate level of accessibility as taught by Tormasov, in the context of the distributed cluster node system of Goren because the result would have permitted restoration of the files should fault tolerance is needed.

With respect to claims 12-13, 5-17, 34-36, and 40-42, Goren teaches operating each member of said plurality of hardware-independent cluster nodes further comprising: installing an operating system and establishing and configuring network connections; providing access to the distributed file system containing the file system template for each virtual environment within said cluster node; accessing the resources of said cluster node; and utilizing said cluster node for launching new virtual environments [Fig. 6; Par. 0053; 0067].

With respect to claims 18-19, Tormasov teaches operating a virtual environment including: repairing remotely any failed software configuration of said virtual environment and achieving a corresponding fault tolerance level [Par. 0040-0041; 0027].

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

Art Unit: 2186

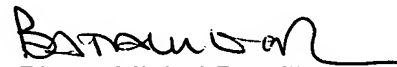
filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (9:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2186

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

December 5, 2004

PIERRE BATAILLE
PRIMARY EXAMINER